Buchalter Docket No.: H9925-2405

IN THE CLAIMS

1. (Previously Presented) A thermal interface composition, comprising:

at least two siloxane-based compounds, wherein each compound has a different solubility parameter,

at least one inorganic micro-filler material, and

at least one thermally conductive filler material.

- 2. (Previously Presented) The thermal interface composition of claim 1, wherein at least one of the siloxane-based compounds comprises a polysiloxane compound.
- 3. (Previously Presented) The thermal interface composition of claim 1, wherein at least one of the siloxane-based compounds comprises a hydride-functional siloxane compound.
- 4. (Previously Presented) The thermal interface composition of claim 2, wherein the polysiloxane compound comprises a substituted polysiloxane compound.
- 5. (Currently Amended) The thermal interface composition of claim 4, wherein the polysiloxane compound is substituted by a functional group comprising an alkyl group, an aromatic group, a halide group or a combination combinations thereof.
- 6. (Previously Presented) The thermal interface composition of claim 4, wherein the substituted polysiloxane compound comprises an alkenyl-terminated polyalkylsiloxane.
- 7. (Previously Presented) The thermal interface composition of claim 6, wherein the alkenyl-terminated polyalkylsiloxane comprises a vinyl group.
- 8. (Previously Presented) The thermal interface composition of claim 7, wherein the alkenyl-terminated polyalkylsiloxane further comprises a methyl group.
- 9. (Currently Amended) The thermal interface composition of claim 5, wherein the polysiloxane compound comprises vinylmethylcyclotetrasiloxane, polytetradecylmethylsiloxane, polyoctylmethylsiloxane, decylmethylsiloxane, butylated aryloxy-propylmethylsiloxane, etadecylmethylsiloxane, octadecylmethylsiloxane,

Buchalter Docket No.: H9925-2405

dimethylsiloxane or a combination combinations thereof.

- 10. (Previously Presented) The thermal interface composition of claim 3, wherein the hydride-functional siloxane comprises methylhydrosiloxane.
- 11. (Previously Presented) The thermal interface composition of claim 1, wherein the inorganic micro-filler material comprises silicon dioxide.
- 12. (Previously Presented) The thermal interface composition of claim 1, wherein the inorganic micro-filler material comprises a powder.
- 13. (Previously Presented) The thermal interface composition of claim 1, wherein the inorganic micro-filler material comprises a flake.
- 14. (Previously Presented) The thermal interface composition of claim 1, wherein the thermally conductive filler material comprises a transition metal.
- 15. (Previously Presented) The thermal interface composition of claim 1, wherein the thermally conductive filler material comprises boron.
- 16. (Previously Presented) The thermal interface composition of claim 14, wherein the transition metal comprises copper.
- 17. (Previously Presented) The thermal interface composition of claim 15, wherein the thermally conductive filler material comprises boron nitride.
- 18. (Previously Presented) The thermal interface material of claim 1, further comprising at least one additive.
- 19. (Previously Presented) The thermal interface material of claim 18, wherein the additive comprises a catalyst.
- 20. (Previously Presented) The thermal interface material of claim 18, wherein the additive comprises an inhibitor.
- 21. (Previously Presented) The thermal interface material of claim 18, wherein the additive comprises a rheological modifier.

Buchalter Docket No.: H9925-2405

22. (Previously Presented) The thermal interface composition of claim 19, wherein the catalyst comprises platinum.

- 23. (Previously Presented) The thermal interface composition of claim 20, wherein the inhibitor comprises an antioxidant.
- 24. (Previously Presented) The thermal interface composition of claim 21, wherein the rheological modifier comprises at least one solvent.
- 25. (Previously Presented) A coating composition comprising the thermal interface composition of claim 1.
- 26. (Previously Presented) A coating composition comprising the thermal interface composition of claim 18.
- 27. (Previously Presented) An electronic component comprising the thermal interface composition of claim 1.
- 28. (Previously Presented) An electronic component comprising the thermal interface composition of claim 18.
- 29. (Previously Presented) An electronic component comprising the coating solution of claim 25.
- 30. (Previously Presented) An electronic component comprising the coating solution of claim 26.
- 31. (Previously Presented) A semiconductor component comprising the thermal interface composition of claim 1.
- 32. (Previously Presented) A semiconductor component comprising the thermal interface composition of claim 18.
- 33. (Previously Presented) A semiconductor component comprising the coating solution of claim 25.
- 34. (Previously Presented) A semiconductor component comprising the coating solution of claim 26.

Buchalter Docket No.: H9925-2405

35. (Previously Presented) A method of forming a thermal interface material, comprising:

providing at least two siloxane-based compounds, wherein each compound has a different solubility parameter,

providing at least one inorganic micro-filler material,

providing at least one thermally conductive filler material, and

combining the at least two siloxane-based compounds, the at least one inorganic microfiller material and the at least one thermally conductive filler material.

- 36. (Previously Presented) The method of claim 35, wherein at least one of the siloxane-based compounds comprises a polysiloxane compound.
- 37. (Previously Presented) The method of claim 35, wherein at least one of the siloxane-based compounds comprises a hydride-functional siloxane compound.
- 38. (Previously Presented) The method of claim 36, wherein the polysiloxane compound comprises a substituted polysiloxane compound.
- 39. (Currently Amended) The method of claim 38, wherein the polysiloxane compound is substituted by a functional group comprising an alkyl group, an aromatic group, a halide group or a combination combinations thereof.
- 40. (Previously Presented) The method of claim 38, wherein the substituted polysiloxane compound comprises an alkenyl-terminated polyalkylsiloxane.
- 41. (Previously Presented) The method of claim 40, wherein the alkenyl-terminated polyalkylsiloxane comprises a vinyl group.
- 42. (Previously Presented) The method of claim 41, wherein the alkenyl-terminated polyalkylsiloxane further comprises a methyl group.
- 43. (Currently Amended) The method of claim 39, wherein the polysiloxane compound comprises vinylmethylcyclotetrasiloxane, polytetradecylmethylsiloxane, polyoctylmethylsiloxane, decylmethylsiloxane, butylated aryloxy-propylmethylsiloxane, octadecylmethylsiloxane, dimethylsiloxane or a combination combinations thereof.

Buchalter Docket No.: H9925-2405

44. (Previously Presented) The method of claim 37, wherein the hydride-functional siloxane comprises methylhydrosiloxane.

- 45. (Previously Presented) The method of claim 35, wherein the inorganic micro-filler material comprises silicon dioxide.
- 46. (Previously Presented) The method of claim 35, wherein the inorganic micro-filler material comprises a powder.
- 47. (Previously Presented) The method of claim 35, wherein the inorganic micro-filler material comprises a flake.
- 48. (Previously Presented) The method of claim 35, wherein the thermally conductive filler material comprises a transition metal.
- 49. (Previously Presented) The method of claim 35, wherein the thermally conductive filler material comprises boron.
- 50. (Previously Presented) The method of claim 48, wherein the transition metal comprises copper.
- 51. (Previously Presented) The method of claim 49, wherein the thermally conductive filler material comprises boron nitride.
- 52. (Previously Presented) The method of claim 35, further comprising at least one additive.
- 53. (Previously Presented) The method of claim 52, wherein the additive comprises a catalyst.
- 54. (Previously Presented) The method of claim 52, wherein the additive comprises an inhibitor.
- 55. (Previously Presented) The method of claim 52, wherein the additive comprises a rheological modifier.
- 56. (Previously Presented) The method of claim 53, wherein the catalyst comprises platinum.
- 57. (Previously Presented) The method of claim 54, wherein the inhibitor comprises an

Buchalter Docket No.: H9925-2405

antioxidant.

- 58. (Previously Presented) The method of claim 55, wherein the rheological modifier comprises at least one solvent.
- 59. (Previously Presented) A coating composition produced from the method of claim 35.
- 60. (Previously Presented) A coating composition produced from the method of claim 52.
- 61. (Previously Presented) An electronic component comprising the coating solution of claim 59.
- 62. (Previously Presented) An electronic component comprising the coating solution of claim 60.
- 63. (Previously Presented) A semiconductor component comprising the coating solution of claim 59.
- 64. (Previously Presented) A semiconductor component comprising the coating solution of claim 60.